

## Claims:

1. (Currently Amended) A clinical laboratory management system comprising:  
an analyzer being of a type without a dilution mode which is performable of types of assays on for analyzing a sample received in a quantity; and

a management apparatus connected to the analyzer, wherein the management apparatus comprises~~[[:]~~ a computer and a memory which stores (a) a database which stores an analyzer specification code for identifying the analyzer and the type thereof and requested assay information for identifying at least one requested type of assay to be performed on the sample, and (b) a master file which stores calculation methods for calculating required total sample quantities necessary for the analyzer to perform the types of assays individually and in combination,

a database configured for storing a result of an assay output from the analyzer, analyzer code for identifying whether or not the analyzer used for the assay has a dilution mode, and diluted sample identification information for identifying whether or not the sample used in the assay is a diluted sample; and

the memory also storing a plurality of program modules executable by the computer to:

use the requested assay information stored in the database and one of the methods stored in the master file, which is selected by the computer in accordance with the requested assay information, to calculate, and store in the database, a required total quantity necessary for the analyzer to perform the at least one requested type of assay on the sample;

receive, and store in the database, a dilution instruction for diluting the sample;  
respond to reception of the dilution instruction to divide the required total quantity stored in the database by the received quantity of the sample to calculate, and store in the database, a dilution rate of the sample;

receive, and store in the database, an assay result of the sample from the analyzer;

respond to reception of the assay result to examine the analyzer specification code stored in the database and determine whether the database stores the dilution instruction in order to decide whether the assay result should be corrected; and when it is decided that the assay result should be corrected, read out the stored dilution rate from the database to correct the assay result with the dilution rate.

a computer configured for determining whether the analyzer used in the assay has a dilution mode and the sample used in the assay is a diluted sample, and for correcting the result when the analyzer used in the assay does not have a dilution mode and the sample used in the assay is a diluted sample.

2. (Currently Amended) The clinical laboratory management system of claim 1, further comprising a first analyzer of a type with the dilution mode and a second analyzer of the type without the dilution mode ~~for outputting a result of the assay,~~ wherein the first analyzer and the second analyzer are connected to the management apparatus, ~~wherein the first analyzer has a dilution mode, and wherein the second analyzer does not have a dilution mode.~~

3. (Canceled)

4. (Currently Amended) The clinical laboratory management system of claim ~~3~~claim 1, wherein the database ~~[[is]] further configured to stores [[a]] a suction~~ quantity of the sample required for the analyzer to perform the respective types of assays by the analyzer and a quantity of the sample used in the assay, and the computer calculates the dilution rate based on the quantity of the sample required for the assay and the quantity of the sample used in the assay.

5. (Currently Amended) The clinical laboratory management system of claim 4, wherein the database of the management apparatus is connected to a terminal device for information input, and the computer displays a screen ~~for receiving~~which invites an input of the received quantity of the sample ~~used in the assay.~~

6. (Currently Amended) The clinical laboratory management system of claim 4, wherein the received quantity of the sample ~~used in the assay~~ is a value pre-stored in the database.

7. (Currently Amended) The clinical laboratory management system of claim 5, wherein the computer determines whether the received quantity of the sample ~~used in the assay~~ has been input from ~~the display on~~ the terminal device, such that ~~when the computer determines and when it is determined~~ that the received quantity of the sample ~~used in the assay~~ has not been input from ~~the display on~~ the terminal device, the computer uses a pre-stored value ~~is used as the~~ received quantity of the sample ~~used in the assay~~ when calculating the dilution rate.

8. (Currently Amended) The clinical laboratory management system of claim 4, wherein the management apparatus is connected to a printing device and outputs the dilution rate ~~that is calculated to the printing device, and wherein the printing device prints the dilution rate received from the management apparatus.~~

9. (Original) The clinical laboratory management system of claim 8, wherein the printing device prints the dilution rate and the sample identification information.

10. (Original) The clinical laboratory management system of claim 9, wherein the sample identification information is printed as a bar code.

11. (Original) The clinical laboratory management system of claim 1, wherein the management apparatus is connected to the analyzer through a network.

12. (Currently Amended) A management apparatus ~~for managing~~ connected to an analyzer being of a type without a dilution mode which is performable of types of assays on a sample received in a quantity, comprising:

a computer and a memory which stores (a) a database which stores an analyzer specification code for identifying the analyzer, the type thereof and requested assay

information for identifying at least one requested type of assay to be performed on the sample, and (b) a master file which stores calculation methods for calculating required total sample quantities necessary for the analyzer to perform the types of assays individually and in combination, a database configured for storing a result of an assay output from the analyzer, analyzer code for identifying whether or not the analyzer used for the assay has a dilution mode, and diluted sample identification information for identifying whether or not a sample used in the assay is a diluted sample; and the memory also storing a plurality of program modules executable by the computer to:

use the requested assay information stored in the database and one of the methods stored in the master file, which is selected by the computer in accordance with the requested assay information, to calculate, and store in the database, a required total quantity necessary for the analyzer to perform the at least one requested type of assay on the sample;

receive, and store in the database, a dilution instruction for diluting the sample;

respond to reception of the dilution instruction to divide the required total quantity stored in the database by the received quantity of the sample to calculate, and store in the database, a dilution rate of the sample;

receive, and store in the database, an assay result of the sample from the analyzer;

respond to reception of the assay result to examine the analyzer specification code stored in the database and determine whether the database stores the dilution instruction in order to decide whether the assay result should be corrected; and

when it is decided that the assay result should be corrected, read out the stored dilution rate from the database to correct the assay result with the dilution rate.

a computer configured for determining whether the analyzer used in the assay has a dilution mode and the sample used in the assay is a diluted sample, and for correcting the result when the analyzer used in the assay does not have a dilution mode and the sample used in the assay is a diluted sample.

13. (Canceled)

14. (Currently Amended) The management apparatus of claim ~~13~~claim 12, wherein the database stores a suction quantity ~~of the sample~~ required for the analyzer to perform the respective types of assays by the analyzer and a quantity of the sample used in the assay, ~~and wherein the computer calculates the dilution rate based on the quantity of the sample required for the assay and the quantity of the sample used in the assay.~~

15. (Currently Amended) The management apparatus of claim 14, wherein the management apparatus is connected to a terminal device for information input, and wherein the database stores a value received from the terminal device as the received quantity of the sample ~~used in the assay.~~

16. (Currently Amended) The management apparatus of claim 14, wherein the received quantity of the sample ~~used in the assay~~ is a value pre-stored in the database.

17. (Currently Amended) The management apparatus of claim 16, wherein the computer determines whether the received quantity of the sample ~~used in the assay~~ has been input from the terminal device, and that when it is determined that the received quantity of the sample ~~used in the assay~~ has not been input from the terminal device, the computer uses the pre-stored value is used as the quantity of the sample ~~used in the assay~~ when calculating the dilution rate.

18. (Currently Amended) The management apparatus of claim 14, wherein the management apparatus is connected to a printing device, wherein the dilution rate ~~that is calculated~~ is output to the printing device, ~~and wherein the printing device prints the dilution rate.~~

19. (Original) The management apparatus of claim 12, wherein the management apparatus is connected to the analyzer through a network.

20. (New) A clinical laboratory management system comprising:

an analyzer being of a type without a dilution mode which is performable of types of assays on a sample received in a quantity; and

a management apparatus connected through a net work to the analyzer, wherein the management apparatus comprises a computer and a memory which stores (a) a database which stores an analyzer specification code for identifying the analyzer and the type thereof and requested assay information for identifying at least one requested type of assay to be performed on the sample, and (b) a master file which stores calculation methods for calculating required total sample quantities necessary for the analyzer to perform the types of assays individually and in combination,

the memory also storing a plurality of program modules executable by the computer to:

use the requested assay information stored in the database and one of the methods stored in the master file, which is selected by the computer in accordance with the requested assay information, to calculate, and store in the database, a required total quantity necessary for the analyzer to perform the at least one requested type of assay on the sample;

receive, and store in the database, a dilution instruction for diluting the sample;

respond to reception of the dilution instruction to divide the required total quantity stored in the database by the received quantity of the sample to calculate, and store in the database, a dilution rate of the sample;

receive, and store in the database, an assay result of the sample from the analyzer;

respond to reception of the assay result to examine the analyzer specification code stored in the database and determine whether the database stores the dilution instruction to decide whether the assay result should be corrected; and

when it is decided that the assay result should be corrected, read out the stored dilution rate from the database to correct the assay result with the dilution rate.